

WE CLAIM:

1. A system for determining the position of a touch on a touch sensor comprising a first user contact point separate from the touch sensor, wherein information from both the first user contact point and the touch on the touch sensor is used to determine the position of the touch on the touch sensor.
2. The system of claim 1 wherein a user touches both the touch sensor and the first user contact point.
3. The system of claim 1 further comprising a touch sensor switch electrically connected to the touch sensor, a user contact point switch electrically connected to the first user contact point, and a power source, wherein the touch sensor switch and the user contact point switch are further electrically connected to the power source.
4. The system of claim 3, wherein the touch sensor switch or the user contact point switch must be closed in order for the system to determine a position of a touch to the touch sensor.
5. The system of claim 1 further comprising a second user contact point separate from the touch sensor.
6. The system of claim 5 wherein the first and second contact points are uniquely driven so that touches from different users associated with each contact point can be distinguished.
7. The system of claim 1 wherein the first user contact point and the touch sensor are mounted in a single touch system housing.
8. The system of claim 1 wherein the first user contact point is driven with a guard signal that reduces noise in the system.

9. The system of claim 1 wherein the first user contact point must be touched in order for the touch system to determine the position of a touch to the touch sensor.
10. The touch system of claim 5 wherein the system further includes a second user contact point switch electrically coupled to the second user contact point, wherein the combination of the first and second user contact point switches and the touch sensor switch being open and closed defines system modes.
11. A method for determining a position of a touch on a touch sensor, comprising:
collecting information from a first contact point, the first contact point being separate from the touch sensor;
collecting information from the touch on the touch sensor; and
determining the position of the touch on the touch sensor using information from both the first contact point and the touch sensor.
12. The method of claim 11 wherein a touch sensor switch is associated with the touch sensor and first contact switch is associated with the first contact point.
13. The method of claim 11 further comprising a second contact point.
14. The method of claim 13 wherein a second contact switch is associated with the second contact point, wherein in a first mode the touch sensor switch is closed and the first and second contact switches are open, wherein in a second mode the first contact switch is closed and the touch sensor switch and the second contact switch are open, wherein in a third mode the second contact switch is closed and the touch sensor switch and first contact switch are open, wherein in a fourth mode the first and second contact switches are closed and the touch sensor switch is open, and wherein in a fifth mode the touch sensor switch and the first and second contact switches are closed.
15. The method of claim 13 further comprising the step of discriminating among touch inputs to the touch sensor based on whether or not one of the contact points has been touched.

16. The method of claim 15 wherein completing the circuit includes bypassing a ground.
17. The method of claim 13 wherein determining the position of the touch includes measuring and reporting the location of the touch to the touch sensor to a processor.
18. The method of claim 11 wherein the touch sensor is a capacitive touch sensor and a sensitivity of the touch sensor is enhanced by completing a circuit that comprises a user and the touch sensor and does not include a ground.

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